

APPENDIX F. CORVALLIS REGULATORY/INFRASTRUCTURE ANALYSIS

Guidelines for using the Pathway Analysis Worksheet

Purpose:

The purpose of this paper is to provide guidance and consistency in evaluating the City of Corvallis' Development Code, Comprehensive Plan, and other plans and policies using the Pathway Analysis Worksheet. The Pathway Analysis Worksheet is a spreadsheet created to systematically analyze and evaluate the City of Corvallis' documents.

Please also refer to the Pathway Analysis Worksheet for clarification.

Process:

Generally, the process involves:

1. Screening the code, plan, or policy language for sections that may impact stream habitat.
2. Citing and documenting the language and relevant information.
3. Characterizing the pathway.
4. Analyzing the language.
5. Scoring and documenting the results.

What follows is a step-by-step description of the process for performing regulatory analysis using the Pathway Analysis Worksheet.

Step 1: Screening

The first step involves screening the document for sections that may have positive or negative effects on stream habitat or for sections where a clear connection or pathway exists but the effects are deemed neutral. When screening, the key question that should be considered is:

Key Question: Could the subject of the section (actions, uses, activities, behaviors, or authorities, etc.) have an impact on protected fish or stream habitat?

If a nexus can be discerned, then a record for the section should be entered in the worksheet.

Step 2: Citation and Documentation

If a record is warranted, the second step is to fill out Columns 5 through 8 in the worksheet. These items must provide a clear reference from the document item to the line item in the worksheet. The "Description" column includes either a synopsis of the language within the section, a paraphrase, or an excerpt. If more than one document was included in the worksheet, also add a document identification code in Column 1.

Step 3: Characterize the Pathway

The third step is to characterize the pathway by filling out Columns 2, 3, and 4 in the worksheet. This involves:

1. Identifying the pathway or conveyance as either:
 - a. channelization,
 - b. barrier,
 - c. buffer,
 - d. contaminants, or
 - e. impervious surfaces;
2. Identifying the type of impact as either Direct or Indirect; and
3. Ascribing a positive, negative, or neutral influence to the pathway.

Step 4: Analyze the Code Section, Plan, or Policy

Code analysis goes on throughout the five-step process. Step four, Analysis of the Code Section, involves clarifying and isolating the relevant connection between the substance of the code documented in the Description, the Pathway/Conveyance, and the effect on stream habitat.

If necessary, notes, calculations, diagrams, and detailed rationale can be documented on the hard copy of the development code.

Step 5: Scoring, Discussion, and Justification

Having clarified and isolated the pathway identified in the code section, it can now be scored based on the following columns in the worksheet:

Filter: This column provides a useful way to categorize the language used in the code section (Definite or Conditional, Quantifiable or Non-Quantifiable).

Magnitude: This is used to describe the geographic area or extent to which the language applies.

Duration: This is a measure used to describe how long lasting the impacts of the pathway are to habitat.

Intensity: This is a relative measure of the level of impact of benefit or harm to habitat, and is not associated with geographic extent (magnitude), duration, or proximity to habitat.

General Working Rules:

- Review each document by major paragraph or section. No more than one line item should be created in the worksheet for each major paragraph or section number. If necessary, analyze subsections collectively.

- Analyze, evaluate, and document only what appears within the major paragraph or section (ignore references to other sections – they will have their own line item).
- When reviewing purpose statements, vision statements, policy goals, or research that can be considered directed at water quality or stream habitat but which do not establish a conveyance or pathway, a line item may be entered without scoring the item. Also, enter an item in the worksheet when a connection to water quality or stream habitat exists and a pertinent statement or goal is noticeably absent.
- When analyzing regulatory language, screen the statements carefully to identify any causal relationship between the statement and a pathway or conveyance.
- When screening policies, goals, or vision statements, only include those that seem clearly directed at protection of habitat, water quality, or specific pathways or conveyances, or statements that might unintentionally result in tangible impacts to water quality, habitat, or a pathway or conveyance.
- Generally, introductory statements, background information, and findings of fact should not be included in the worksheet, but relevant policies that result should be included.
- Make sure the pathway is analyzed in isolation; evaluate only the impact of one section at a time. For example, if impervious surface is reduced by a requirement for a landscape buffer, speak only to the reduction of impervious surfaces; do not speak to the impacts that the landscape buffer might produce (e.g., application of horticultural chemicals or other landscape management practices). Landscape management and maintenance requirements were analyzed elsewhere.
- Use the hard copy of the document as a work record of notes, sketches, and calculations. Record detailed rationale for analysis and scoring for future reference.
- When reviewing documents, the following notations are suggested when screening statements:

NA: Not applicable—This indicates that the section does not have a tangible connection to stream habitat.

(i): This indicates that the section may have some relationship to habitat or water quality, but the connection is intangible or inconsequential. For example, a policy statement to perform environmental plans or studies has no tangible benefit or impacts upon habitat, although there is an obvious relationship.

CD: This indicates that the policy statement is a “Code Direction.” If the Code has been reviewed, no entry should be made in the worksheet to avoid redundancy.

REF: This indicates that the statement refers, authorizes, or directs another document. If the document is to be reviewed, do not make an entry in the worksheet. If not, research the reference and make an entry.

Fringe: This indicates that the section pertains to areas outside the City limits (study area).

- **Overlay Districts, Conditional Uses, and Mixed Use zones:** Weight the impacts of overlay zones, conditional uses, and mixed-use zones that replace base zoning against the activities and uses they are likely to replace (e.g., commercial). Replacing commercial zoning with mixed-use zoning may eliminate the possibility of more intensive commercial uses.

Column Definitions:

Line Reference Number: This column is used to record a sequential number for each section of code analyzed in the worksheet for cell reference purposes.

Document ID: This column is used to indicate the document being analyzed. A three-letter abbreviation is used (e.g., Corvallis Comprehensive Plan – CCP).

Impact Type: This column documents whether the impact pathway is **direct** or **indirect**. Direct impacts are those that directly impact stream habitat, for example, contaminants released directly into the waters of a salmon-bearing stream. Contaminants released on land or those that enter stormwater systems would be indirect impacts.

Pathway/Conveyance: This column indicates the pathway or conveyance of the impact. Pathway should be classified as one of the following:

1. Channelization,
2. Impervious Surfaces,
3. Contaminants,
4. Barriers, or
5. Buffers.

Statements can be included in the worksheet which do not correspond to a specific pathway or conveyance. Either multiple pathways or conveyances may apply, or the statement may be too general to tie to a specific pathway or conveyance. In such cases, the column should be used to indicate either “Multiple” or “Not Applicable” (NA).

+/-/0: This column is used to qualify the impact of the code section on habitat as positive, negative, or neutral. For example, a code section with a positive impact might limit the amount of impervious surfaces allowed on sites within a zoning district.

Chapter Name: This column records the chapter name of the code in question.

Section Number: This column lists the specific code reference number being analyzed. When section numbers are not used, this column can be used to indicate a page number.

Section Name: This column lists the specific code name being analyzed.

Description: Description is used to summarize the relevant content of the code section as follows:

First paragraph—code summary,
Second paragraph—conditions or exceptions, and
Third paragraph—list specific indicators or standards.

The “Description” column can include either a synopsis of the language within the section, a paraphrase, or a quotation.

Discussion/Justification: Enter in this column a formatted response to two key questions: 1) What is the relationship between the source use or activity, the pathway, and the habitat? and 2) What is the rationale for scoring this specific pathway for the following parameters: +/-/0, magnitude, duration, and intensity.

Filter: This column provides a useful way to categorize the language used in the code section (Definite or Conditional, Quantifiable or Non- Quantifiable): *Definite*—an absolute and universal requirement, or *Conditional*—a requirement that applies only under certain circumstances or when certain conditions have been met; and *Quantifiable*—a statement or regulation with a clearly measurable effect, or *Non-quantifiable*—a statement that would not result in a measurable effect.

Magnitude: This column documents the geographic extent or scope of the code section. Magnitude is classified as Citywide (Score=3), Reach (Score =2), or Point (Score=1). “Point” means in only one location or on a site-by-site basis. “Reach” means the extent is less than Citywide but in more than one place.

Duration: Duration is a temporal measure of how often or how frequently the pathway occurs or how long a pathway persists. Duration is classified as “Chronic” (Score=3), “Episodic” (Score=2), or a single event occurring only “Once” (Score=1).

Intensity: Intensity is an estimate of the level of impact to stream habitat. Estimates of intensity are High (Score=3), Medium (Score =2), or Low (Score=1). “Low” means little long-term harm to habitat. “High” means certain long-term harm to habitat. “Medium” means moderate impacts to habitat are likely to result.

Area: This column is reserved for later use, when some of the pathways can be quantified.

Subtotal: This column is a subtotal of scoring for Magnitude, Duration, and Intensity.

Weight: The Weight column is used primarily to adjust scoring for pathways that impact habitat directly or indirectly (see Impact Type). Direct impacts should be weighed more heavily than Indirect impacts.

Total: This column indicates the total score based on subtotal and Weight.